

MEMORANDUM FOR THE RECORD

25X1A9a

SUBJECT: Conversation with [REDACTED] NPIC/TRO
(an acknowledged expert in teaching method)

1. To the question: "When you must teach a person to use a machine, must you teach him the internal workings of the machine?" [REDACTED] replied as 25X1A9a follows:

a. "In the Air Force program to teach pilots flying, considerable research revealed that the student pilots were not required to know aeronautics nor the actual construction of the aircraft with the exception that they must have a memorized and complete knowledge of (1) the various controls which the pilot must use and (2) alternate methods of accomplishing the function of the primary controls. The depth of the students' knowledge of aeronautics or construction of the aircraft had little correlation to the capability to learn to operate the machine!"

b. The most significant item of 1a above is in the (2) alternate methods. Comment thereon is that unless the student is also issued a screwdriver and wrench and authorized to open inspection plates, he need ~~not~~ not know anything of inner workings, only field non-technical expedients to correct errors.

2. We then proceeded to the discussion of the fact that some students think they are unable to either trust or use machines the inner workings of which they do not know. This is compared with the student with a totally ~~non~~-technical view of the world and who, when shown the inner workings of the machine immediately reacts: "That's too complicated for me, I'll never understand it." and forthwith closes his mind to the succeeding discussions. We agreed that the appropriate solution to this problem, (and the solution is based firmly upon [REDACTED] experience^{25X1A9a}) is to provide a very brief "look" into the machine just before the end of the course.

SHV